

Before the
FEDERAL COMMUNICATIONS COMMISSION
 Washington, DC 20554

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In the Matter of

Review of Part 15 and other Parts
of the Commission's Rules

To: The Commission

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ET Docket No. 01-278

RM-9375

RM-10051

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

COMMENTS OF COBRA ELECTRONICS CORPORATION

Cobra Electronics Corporation ("Cobra"), by its undersigned counsel and pursuant to section 1.415 of the Commission's rules, hereby submits these Comments in response to the Notice of Proposed Rulemaking ("NPRM") issued in the above-referenced proceeding.¹ Specifically, Cobra addresses questions raised in the NPRM pertaining to alleged interference caused by radar detectors to very small aperture satellite terminal ("VSAT") operations and proposed frequency stability measurements for family radio service ("FRS").²

Cobra is a small, publicly owned, U.S. based consumer electronics sales and marketing company, distributing products primarily for use in the Citizens Band Radio, Family Radio Service, General Mobile Radio Service and Detection System markets. Cobra is a member of the Radio Association Defending Airwave Rights, Inc. ("RADAR") and endorses the comments submitted by that organization in this proceeding. Cobra writes separately, however,

¹ See *Review of Part 15 and other Parts of the Commission's Rules*, ET Docket No. 01-278, Notice of Proposed Rulemaking and Order, FCC 01-290 (released October 15, 2001) ("NPRM").

² See *id.* at ¶¶ 10-14, 37-39.

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to urge the Commission to refrain from imposing additional emissions limitations on the operation of radar detectors and instead allow the industry to work to address the interference concerns of the complaining VSAT operators. As detailed below and in the comments of RADAR, the industry is already well on its way to addressing these concerns.

I. Background of Cobra and its radar detectors

Cobra began designing and marketing radar detectors in the 1970s. These radar detectors are superheterodyne receivers and utilize local oscillators together with the signal received from a police radar transmitter to produce a detectable signal which generates a visual and audible alarm to alert the user. Cobra's radar detectors were originally designed with a first local oscillator to operate in the 10.2-11.7 GHz band.³ A more recent design utilizes a first local oscillator that sweeps over a frequency range that includes the VSAT band at 11.7-12.2 GHz. Since most VSAT terminals are located above ground level and are angled at least five degrees above the horizon,⁴ no interference concerns were anticipated with moving radar detectors on the ground level.

Cobra's radar detectors also employ several safety features to enhance their value to consumers. Cobra's patented Safety Alert Traffic Warning System places K-band radar transmitters on emergency vehicles, construction equipment, and train crossings that emit a signal when in a location that is potentially dangerous to the public. A Cobra radar detector picks up this signal and alerts the user with visual and audio indicators of the nearby emergency

³ Notably, this is the same band in which Fixed Service microwave operators function. In the over 20 years that radar detectors and Fixed Service microwave operators have shared this band, Cobra has received no interference complaints from these operators, nor is it aware of any other complaints in the industry.

⁴ See 47 C.F.R. § 25.205 (2001).

situation. Cobra has sold these systems to municipalities in all 50 states. In addition, Cobra radar detectors are equipped with Strobe Alert Detection Systems, which provide the user with the ability to detect when an emergency vehicle has emitted a signal to change a traffic light to green in its direction. This safety system has been installed in more than 50,000 intersections in the country.

II. The NPRM supplies insufficient evidence of VSAT interference by radar detectors to support additional regulation.

Radar detectors are classified as unintentional radiators under the Commission's rules because they are not intended to emit RF energy by radiation or induction.⁵ Furthermore, because they only tune to frequencies above 960 MHz, they have been exempt from specific emission regulation.⁶ However, under the Commission's rules, unintentional radiators, such as radar detectors, may not cause harmful interference to other operations.⁷ Harmful interference is defined in the rules as interference that "seriously degrades, obstructs or repeatedly interrupts" another service.⁸

There is insufficient evidence presented in the NPRM to justify the imposition of specific emission limits on radar detectors. In fact, the information contained in the NPRM does not even support the conclusion that the alleged interference caused to VSAT operators by radar detectors rises to the level of "harmful interference." The NPRM provides precious little information about the interference caused to the VSAT community, indicating only that the Commission has received "a number of reports of interference" from VSAT operators caused by the operation of radar detectors and that this interference has some unspecified impact on VSAT

⁵ See 47 C.F.R. § 15.3(z) (2001).

⁶ See 47 C.F.R. § 15.101(b) (2001).

⁷ See 47 C.F.R. § 15.5(b) (2001).

operations.⁹ This evidence is insufficient to support a finding of harmful interference much less the imposition of specific emission limits for radar detectors.

III. The imposition of Part 15 emission limits will substantially increase the price of radar detectors and eliminate the product from the market.

The Commission correctly recognizes that subjecting radar detectors to the emission limits contained in Part 15 of the FCC's rules would require significant redesigning of the product.¹⁰ This would effectively eliminate the product from the market. Radar detectors as currently manufactured employ a simple engineering design, allowing for a relatively moderate production cost. Today these radar detectors can be purchased at many well known retail outlets at prices ranging from \$49.00 to \$300.00. Increased regulation requiring compliance with Part 15 emissions limits would require a completely alternative design and increased component sophistication that would increase the cost of the product exponentially. As a moderately priced consumer product, an exponential jump in cost would lead to an unreasonably high price to consumers and essentially wipe out the industry.

The Commission is under an obligation under the Regulatory Flexibility Act to pay special attention to the concerns of small businesses when imposing additional regulation.¹¹ As acknowledged in its Initial Regulatory Flexibility Analysis (IRFA), radar detector manufacturers, such as Cobra, are small entities who deserve such consideration.¹² Redesigning its entire radar detector product line – especially considering the very real possibility delineated above that doing so would eliminate the market for this product – obviously would be

⁸ See 47 C.F.R. § 2.1(c) (2001).

⁹ See *NPRM* at ¶ 11.

¹⁰ See *id.* at ¶ 13.

¹¹ See 5 U.S.C. § 601 *et. seq.*

¹² See *NPRM* at Appendix C.

detrimental to small businesses such as Cobra, especially when there is evidence that the industry is already addressing the VSAT interference complaints.

IV. Cobra will redesign its product to address the concerns of the VSAT operators.

Because Cobra understands the importance of resolving interference concerns in cooperation with VSAT operators and the Commission, Cobra voluntarily agrees to redesign its radar detectors so as to limit any emissions to Class B levels in the 11.7-12.2 GHz band. These changes will become effective for all Cobra radar detectors manufactured after June 1, 2003. As RADAR correctly notes in its comments, this lead time is necessary to permit the engineering redesign of these products in a cost-efficient manner. The new design will move the first oscillator emissions back into the 10.7-11.7 GHz band, where they were produced in the past and where there have been no known interference problems.¹³ By voluntarily agreeing to this limitation, Cobra and other radar detector manufacturers will address any alleged VSAT interference problems without additional regulation by the Commission.

V. Frequency stability measurements for the Family Radio Service

Cobra also endorses the Commission's proposal to specify that frequency stability measurements for FRS radios should be made from -20 degrees centigrade to +50 degrees centigrade as a condition of equipment authorization.¹⁴ As the Commission noted, from the time the service was created, FRS radios had to demonstrate frequency tolerance within this temperature range in order to receive certification. Millions of these radios functioning within these temperature limits have been manufactured and distributed with no reported difficulties

¹³ See *infra*, footnote 3.

¹⁴ See *NPRM*, ¶ 39.

from the users of the radios. Thus, Cobra endorses an amendment to section 2.1055(a)(2) of the Commission's rules to reflect the current practice of requiring FRS radios to demonstrate frequency stability at a temperature range of -20 degrees centigrade to +50 degrees centigrade prior to receiving equipment authorization.

Respectfully submitted,

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